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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/427,263	10/26/1999	RICHARD HANS HARVEY	(19970009) 063170.6269	2940
5073	7590	01/11/2006	EXAMINER	
BAKER BOTTS L.L.P.			ALAM, SHAHID AL	
2001 ROSS AVENUE			ART UNIT	
SUITE 600			PAPER NUMBER	
DALLAS, TX 75201-2980			2162	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/427,263

Applicant(s)

HARVEY, RICHARD HANS

Examiner

Shahid Al Alam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 5, 12, 31 - 35, 41, 56 - 58, and 60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 5, 12, 31 - 35, 41, 56 - 58, and 60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed October 21, 2005 have been fully considered but they are not persuasive for the following reasons.

Applicant argues that Leung does not teach "assigning at least one attribute identifier and at least one entry identifier"; "storing the at least one attribute identifier in an attribute table" and "attribute identifier" or "an attribute table".

Examiner respectfully disagrees all of the allegations as argued. Examiner, in his previous office action, gave detail explanation of claimed limitation and pointed out exact locations in the cited prior art.

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification, see MPEP 2111.

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

In response to Applicant's argument that Examiner submits that Leung reference teaches each record contains the system identifier of an object (see Figure 6; page 739, column 1, First paragraph; each record contains the system identifier of an object and each record holds the system identifier of an object and an attribute value of an attribute type of the object in both normalized and raw forms). Leung strongly suggest a DIT

table and ENTRY table, wherein the structure part consists of two objects, the DIT and ENTRY, stored as two relational tables (see page 739, column 1, first paragraph).

Leung reference teaches the ENTRY table holds detailed information about each directory object. Each record holds the system identifier of an object, and an attribute value of an attribute type of the object in both normalized and raw forms (see page 739, column 1, first paragraph).

For the above reasons, Examiner believed that rejection of the last Office action was proper.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 5, 12, 31 – 35, 41, 56 – 58, and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by the publication, "An Object.-Oriented Approach to Directory Systems," by C.M.R. Leung, IEEE Region 10 Conference on Computer and Communications Systems, September, 1990, Hong Kong, pages 736 – 740, hereinafter, "Leung."

With respect to claims 1 and 31, Leung teaches storing data in a database comprising: obtaining both a raw form of data to be stored and a syntax-normalized

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form of said data; assigning at least one attribute identifier and at least one entry identifier to said data (see Figure 6; page 739, column 1, First paragraph; each record contains the system identifier of an object and each record holds the system identifier of an object and an attribute value of an attribute type of the object in both normalized and raw forms); storing concurrently in a first table (DIT) and a second table (ENTRY) the at least one entry identifier and both the syntax-normalized form and the raw form of said data (Page 738, column 2, Figure 6 and Page 739, column 1, First paragraph); and storing the at least one attribute identifier in an attribute table (page 739, column 1, first paragraph).

As to claims 2 and 32, first obtaining the raw form of data; and then generating a syntax-normalized form of data (page 738, col. 2).

As to claims 3 and 33, maintaining both the syntax-normalized and raw form of data for database searching and data retrieval (page 738, column 2, last paragraph).

As to claims 4 and 34, maintaining said raw form and syntax-normalized form of data in at least two entry tables (Figure 6 of page 738, column 2, shows tables).

As to claims 5 and 35, correlating the storage location of said raw form and said syntax-normalized form in said at least two entry tables (Figure 6 of page 738, column 2, shows tables).

As to claims 12 and 41, a method and apparatus of locating data in a database wherein the data is stored linked to a syntax-normalized form of the data and comprising the step of locating said data by searching on said syntax-normalized form

of the data (page 738, column 2, Figure 6; The normalized values allow efficient value matching of all attribute types through the use of standard SQL query language).

With respect to claim 56, Leung further teaches an apparatus for transferring data in and out of a database for a directory service system wherein the data is stored in raw form and in syntax-normalized form as claimed comprising means for finding data in the database using a syntax-normalized form; and means for transferring data out of the database using a raw form (Page 738, column 2, Figure 6 and Page 739, column 1, First paragraph).

Claim 57 is essentially the same as claim 1 except it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied above.

As to claims 58 and 60, raw form as being ASN.1 formats, see Leung, page 736, column 1 and 2, Sections, "Introduction" and "Directory Systems" that detail various directory services standards.

***Contact Information***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahid Al Alam whose telephone number is (571) 272-4030. The examiner can normally be reached on Monday-Thursday 8:00 A.M.- 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Shahid Al Alam  
Primary Examiner  
Art Unit 2162

January 5, 2006